

Attorney Docket No. H 4222 PCT/US

Serial No. 10/018,922

Art Unit: 1615

Applicants' Reply to the Office Action of December 16, 2004

Amendments to the Claims

Please amend the claims as shown in the Listing of Claims below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (Canceled)

23. (Previously presented) A microcapsule having a mean diameter of from about 0.1 to about 5 mm, a membrane and a matrix containing at least one active principle wherein the microcapsule is the product of the process comprising the steps of (a) forming an aqueous matrix by heating an aqueous solution comprised of a gel former, an anionic polymer selected from the group consisting of a salt of alginic acid and an anionic chitosan derivative and active principle; (b) forming a dispersed matrix by adding the aqueous matrix in an oil phase; (c) contacting the dispersed matrix with an aqueous solution of chitosan.

24. (Currently amended) A process for producing a microcapsule having a mean diameter of from about 0.1 to about 5 mm, a membrane and a matrix containing at least one active principle comprising the steps of (a) forming an aqueous matrix by heating an aqueous solution comprised of a gel former, an anionic polymer selected from the group consisting of a salt of alginic acid and an anionic chitosan derivative, and active principle; (b) forming a dispersed matrix by adding the aqueous matrix in an oil phase; (c) contacting the dispersed matrix with an aqueous solution of chitosan.

25. (Previously presented) The process of claim 24 wherein the gel former is a heteropolysaccharide or a protein.

26. (Currently amended) The process of claim 24 25 wherein the heteropolysaccharide is an agarose, agar agar, a pectin, a xanthan and mixtures thereof.

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27. (Currently amended) The process of claim 24 25 wherein the protein is gelatine.
28. (Previously presented) The process of claim 24 wherein the average molecules weight of the chitosan is from about 10,000 to about 1,200,000 daltons.
29. (Previously presented) The process of claim 28 wherein the molecular weight is from about 500,000 to about 800,000 daltons.
30. (Previously presented) The process of claim 24 wherein the active principle is selected from the group consisting of a surfactant, a cosmetic oil, a pearlizing wax, a stabilizer, a biogenic agent, a deodorant, an antiperspirant, an antidandruff agent, an UV protection factor, an antioxidant, a preservative, an insect repellent, a self-tanning agent, a perfume oil, a flavor, a bleaching agent, a bleach activator, an enzyme, a redeposition inhibitor, an optical brightener and a dye.
31. (Previously presented) The process of claim 24 wherein the amount of active principle in the microcapsule is from about 0.1 to about 25% by weight.
32. (Previously presented) The process of claim 24 wherein the matrix is further comprised of an emulsifier, a viscosity adjuster or a combination thereof.
33. (Previously presented) The process of claim 24 wherein the process is carried out at a temperature of from about 40 to about 100°C.
34. (Previously presented) The process of claim 24 wherein the matrix is dispersed in 2 to 5 times its volume of the oil phase.

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35. (Previously presented) The process of claim 24 wherein in step (b) the temperature of the matrix is from about 40 to about 60°C and the temperature of the oil phase is from about 10 to about 20°C.

36. (Previously presented) The process of claim 24 wherein the dispersed matrix is added to from about 0.1 to about 3% by weight of an aqueous solution of chitosan.

37. (Previously presented) The process of claim 36 wherein the dispersed matrix is contacted at a temperature of from about 40 to about 100°C.

38. (Previously presented) The process of claim 37 further comprising step (d) wherein the oil phase is removed.